

*title*           **WATER**  
**The Power, Promise, and Turmoil of North America's Fresh Water**

*author*           various

*category*       North American water issues

*publisher*       National Geographic Society  
<http://www.nationalgeographic.com/>

November 1993 Special Edition, 120 pages

*who should be interested in this book?*

Anyone wanting a quick look at some North American water issues (as seen in 1993) with personal examples.

*why read this book?*

National Geographic's second special edition (the first was on energy), this gives an overview of supply, development, pollution, and restoration themes of North American water issues. Typical N.G.'s good quality pictures, maps and graphics. Mostly US, but BC, Great Lakes, St. Lawrence are included, and there is a chapter (9 pages) on the James Bay project in Quebec.

*review / outline by* Lance Brown, [vistadelsol@telus.net](mailto:vistadelsol@telus.net)

### Overview

Although somewhat dated, many of the issues remain today as written here in 1993. The typical style of N.G. presents the issues as directly felt by ordinary people.

An early quote: *"When the well's dry, we know the worth of water" – B. Franklin.*

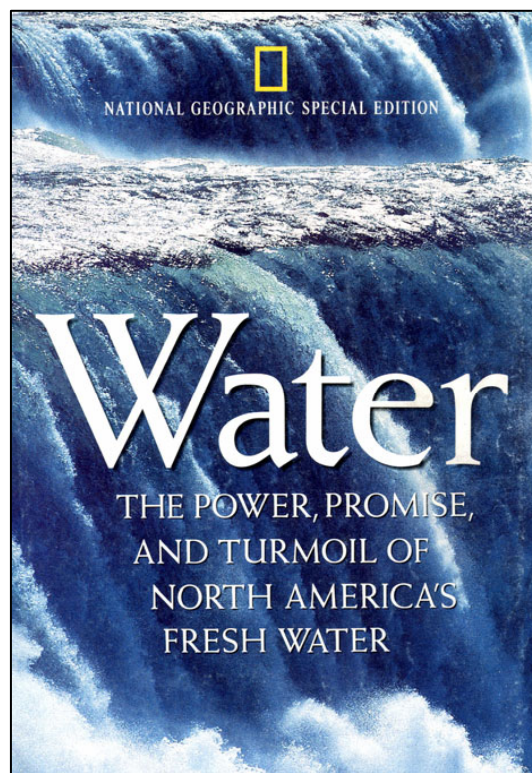
Many stunning pictures and informative maps (as expected from N.G.). Separate double map of US included.

### Chapters & Points of Interest

#### INTRODUCTION

##### 1. *Water – A Portrait in Words and Pictures* by Michael Parfit

- water's energy and value – but we ignore it as long as it's there when we need it
- a human may live a month without food – less than a week without water
- there is becoming a change in the way we use, see, and think about water



## THE CHAOS OF SUPPLY:

### 2. *Sharing the Wealth of Water* by Michael Parfit

- an uneven system: high river flows – wet coastal areas – dry interior areas
- NY City water supply: 9 million people get 1.5 billion gallons a day from 100 miles away, with 6,000 miles of pipe as deep as 800 feet
- US irrigation uses 137 billion gallons a day – down from 150 billion (aquifer decline)
- US water law varies but tends to be “prior appropriation” (first in time, first in right) in the West and “riparian” (those along a stream can use the water) in the East
- water rights have been called “fractionalized, disorganized, and anything but organized”
- issues about the Edwards Aquifer, near San Antonio, Texas – an underground river
- city of Tucson water management has use down to 104 gallons per person per day

### 3. Case Study: *California: Desert in Disguise* by Richard Conniff

- 700 sq miles of rice grown – 4 to 7 feet of water per acre
- maps of the state showing supply, delivery, use
- the California Aqueduct, a 600 mile project lifts water over a 3,000 ft ridge to move south
- agriculture uses 80% of state water – 1,700 gallons to grow 1 adults food for 1 day
- expanding population, most in south, while most water is in the north

## THE POWER OF DEVELOPMENT:

### 4. *When Humans Harness Nature's Forces* by Michael Parfit

- US Bureau of Reclamation, the Army Corp of Engineers, the Tennessee Valley Authority
- a lot of dams built starting in the 1930's
- most water is considered “developed”; about 9% of US rivers are free flowing

### 5. Case Study: *James Bay: Where Two Worlds Collide* by John G. Mitchell.

- many large hydroelectric developments being built – flooding or displacing native people
- detailed map of projects in northern Quebec

## THE CHALLENGE OF POLLUTION:

### 6. *Troubled Waters Run Deep* by Michael Parfit

- pollution concerns reviewed

### 7. Case Study: *The Mississippi Under Siege* by William S. Ellis, Assistant Editor

- wide range of human activities along Mississippi
- map of water shed – from Helena, Montana (in west) to about 100 miles of Washington DC (in east) and into southern Alberta and Saskatchewan - all draining to New Orleans

## THE PROMISE OF RESTORATION:

### 8. *New Ideas, New Understanding, New Hope* by Michael Parfit

- rebirth of Nashua River, Massachusetts
- Clean Water Act / point sources / non-point sources
- changing attitudes towards rivers